

MSP/MCD DECAL APPLICATION POLICY FOR SCHOOL BUSES

STEERING

Steering: General

Steering Shaft and Travel

YELLOW: Steering stops allow tire to rub on frame, metal or other chassis part

YELLOW: Missing steering stop

RED: Any fabric joint or steering gear where the direct connection between the two halves is not continuous

RED: Front wheels are incapable of being turned to right and left; steering stops without binding or interference

RED: Any modification or other condition that interferes with free movement of any steering component. *NST SBI 10.40*

Steering Wheel Free Play: When any of these values (inch movement or degrees) are met or exceeded. For power steering systems, engine must be running.

RED: Any wheel free play that exceeds the chart below

<u>Steering Wheel Diameter</u>	<u>Manual System Movement 30 degrees or</u>	<u>Power System Movement * 45 degrees</u>
16" (41 cm)	2" (5.1 cm)	4 ½" (11.5 cm)
18" (46 cm)	2 ¼" (5.4 cm)	4 ¾" (12 cm)
20" (51 cm)	2 ½" (6.4 cm)	5 ¼" (13.5 cm)
22" (56 cm)	2 ¾" (7 cm)	5 ¾" (14.5 cm)

RED: For power systems, if the steering wheel movement exceeds 45 degrees before the steering axle tires move, proceed as follows: Rock the steering wheel left to right between points of power steering value resistance. If that motion exceeds 30 degrees or the inch movement values shown for manual steering, the vehicle will be red tagged.

Steering Column

RED: Any absence or looseness of U-bolt(s) or positioning part(s). *NST SBI 10.40*

RED: Worn, faulty, or obvious repair-welded universal joint(s). *NST SBI 10.40*

RED: Steering components when not properly secured. *NST SBI 10.40*

Front Axle Beam and All Steering Components other than Steering Column, Including Hub

RED: Any crack(s)

RED: Any obvious welded repair

Steering Gear Box

RED: Any mounting bolt(s) loose or missing. *NST SBI 10.43*

RED: Any crack in gearbox or mounting brackets *NST SBI 10.43*

RED: Any obvious welded repair *NST SBI 10.43*

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STEERING (cont.)

Pitman Arm

RED: Any looseness of the Pitman arm on the steering gear output shaft *NST SBI 10.44*

RED: Any obvious welded repair *NST SBI 10.44*

Power Steering

RED: Auxiliary power assist cylinder loose *NST SBI 10.45*

RED: Power steering pump inoperable *NST SBI 10.45*

Ball and Socket Joints

RED: Any movement under steering load of a stud nut *NST SBI 10.46*

RED: Any motion, other than rotational, between any linkage member and its attachment point of more than 1/8 inch measured with hand pressure only. *NST SBI 10.46*

RED: Any obvious welded repair *NST SBI 10.46*

Tie Rods and Drag Links

RED: Loose clamp(s) or clamp bolt(s) on tie rods or drag links. *NST SBI 10.47*

RED: Any looseness in any threaded joint *NST SBI 10.47*

Nuts, Cotter Pins or other Devices

RED: Loose or missing fasteners on tie rod, Pitman arm, drag link, steering arm, or tie rod arm. *NST SBI 10.48*

Front Wheel Bearings

RED: Excessive wheel bearing play that exceeds OEM specifications. *NST SBI 11.26*

King Pin

RED: If measurement is found to be in excess of 1/4 inch

RED: Collapsed thrust washer and/or bearing

Hoses and Fluids

RED: Any faulty fluid control device, leak or empty reservoir. *NST SBI 10.49*